Title (en)

Transitional programmable controller.

Title (de)

Übergangsabhängige programmierbare Steuerung.

Title (fr)

Séquenceur transitionel programmable.

Publication

EP 0172797 A1 19860226 (FR)

Application

EP 85870078 A 19850530

Priority

US 61658884 A 19840604

Abstract (en)

[origin: US4700326A] An apparatus for controlling external devices in a controlled installation following a control sequence includes a scanning pulse generator arranged to generate scanning pulses at regularly offset times, and an input detection circuit comprising transition detectors each of which detectors is adapted to accept a distinct input variable signal associated with an external device or system component and a respective one of said scanning pulses to detect a transition or change of state of the input variable signal. An address signal is produced substantially immediately for accessing a sequential memory in response to the presence of a respective one of said scanning pulses and an input transition. The sequential memory stores data identifying the stages in the control sequence wherein the different storage locations are designated by a respective address defined by the particular input channel and a given stage. The sequential memory is arranged to accept the address signals from the transition detectors at the time an input transition occurs to provide the new stage data in response to each such transition and corresponding address signal. An output function memory stores the command signals for the external devices under control of the apparatus and responds to the new stage data from the sequential memory and level or alarm signals from the controlled installation to provide the associated command signal.

Abstract (fr)

Un circuit de détection d'entrée comprenant plusieurs détecteurs de transitions (2) dont chacun détecte les transitions ou changements d'état d'un signal de variable d'entrée en réponse à un ordre de scrutation (Cki) correspondant et produit un signal de détection (SCC) lorsqu'une transition du signal d'entrée correspondant se trouve détectée au moment où apparaît l'ordre de scrutation correspondant pendant le cycle de scrutation. Une mémoire séquentielle (10) contenant les données identifiant les étapes d'une séquence de commande reçoit les signaux de détection produits par les détecteurs de transitions afin de délivrer les données identifiant l'étape suivante de la séquence de commande corraspondant à la détection d'une transition pour une et une seule variable d'entrée.

IPC 1-7

G05B 19/04

IPC 8 full level

G05B 19/05 (2006.01); G05B 19/04 (2006.01); G05B 19/045 (2006.01); G06F 9/32 (2006.01)

CPC (source: EP US)

G05B 19/045 (2013.01 - EP US)

Citation (search report)

- [X] US 4142246 A 19790227 - FUMIHIKO TAKEZOE, et al
- [Y] DE 2944711 A1 19810514 - TRUETZSCHLER & CO [DE]
- [Y] EP 0088135 A1 19830914 - ITT IND GMBH DEUTSCHE [DE], et al
- [A] US 4223379 A 19800916 - SIMCOE ROBERT J
- [A] US 4319319 A 19820309 - WYGANT N D

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0172797 A1 19860226; EP 0172797 B1 19910130; AT E60671 T1 19910215; CA 1232074 A 19880126; DE 3581572 D1 19910307; JP S6158005 A 19860325; LU 85563 A1 19860611; US 4700326 A 19871013

DOCDB simple family (application)

EP 85870078 A 19850530; AT 85870078 T 19850530; CA 483068 A 19850603; DE 3581572 T 19850530; JP 12138685 A 19850604; LU 85563 A 19841001; US 61658884 A 19840604